

PROJECT TITLE : PROTAGORAS
PERIOD COVERED : JULY 14 - AUGUST 17, 1981
WRITTEN BY : Bindler G-N (GNB)

For the reasons mentioned in the previous monthly report, we decided to concentrate our work on uncut tobacco. In all the experiments described below Mexican Burley strips from lot 3667 were used.

The following preliminary experiments were performed :

- Extraction I : 20 g of Burley strips were extracted with 200 ml of water for 90 min at 60°C (step 1), then the resulting tobacco was re-extracted with KOH for 90 min at 60°C (step 2) and afterwards with water for 180 min at 37°C (step 3).
- Extraction II : The same as extraction I, except that in step 3 the resulting tobacco was extracted with water and 100 mg pronase from Boehringer for 180 min at 37°C.
- Extraction III : The same as extraction I except that in step 1 the tobacco was extracted with 200 ml water and acid at pH 2 for 90 min at 60°C.

Extraction II gave a 40% greater yield of proteins than extraction I and extraction III gave a 25% greater yield than extraction I.

The change from a low pH to high pH gave a very interesting result. This extract will be investigated and an enzyme extraction step will be added to its treatment.

REFERENCES

- 1) Bindler G-N., Notebook 800804
- 2) Mangilli M-F., Notebook 800805



GNB/jig/AUGUST 25 1981

0000144152